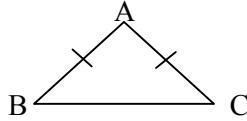
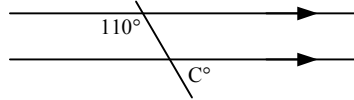


1. $m\angle C = 40^\circ$. Find $m\angle A$.



- (A) 320° (B) 40° (C) 140° (D) 100°

2. Find C



- (A) 35° (B) 70° (C) 250° (D) 110°

3. Simplify -9^{-2}

- (A) $-\frac{1}{81}$ (B) -3 (C) 4.5 (D) $\emptyset$

4. What is the circumference of a circle with an area of $64\pi \text{ in}^2$?

- (A) $8\pi \text{ in}$ (B) $16\pi \text{ in}$ (C) $1024\pi \text{ in}$ (D) $32\pi \text{ in}$

5. Evaluate $xy^3 - xy$ if $x = 3$ and $y = -2$

- (A) 18 (B) 30 (C) -18 (D) 4

6. Simplify: $\frac{x}{yz^2} + \frac{x^2 z^{-1}}{xy^0} - \frac{2xy^{-1}z^{-1}}{z}$

- (A) $-\frac{x}{yz^2} + \frac{x}{z}$ (B) $\frac{x^2}{z} - \frac{x}{yz^2}$ (C) undefined (D) $\frac{x}{yz^2} + \frac{x}{z} - \frac{2x}{y}$

7. Expand: $\frac{3b^{-2}c}{a^0} \left(\frac{4bc^2}{z^{-2}} - \frac{3a^{-2}}{c^{-3}} \right)$

- (A) $-\frac{9c^4}{a^3b^2} + \frac{12c^3z^2}{ab}$ (B) $\frac{12b^3c^3}{z^2} - \frac{9a^2b^2}{c^2}$ (C) $\frac{12c^3z^2}{b} - \frac{9c^4}{a^2b^2}$ (D) undefined

8. Solve: $6\left(\frac{1}{3} - \frac{3}{4}x\right) = -\left(-\frac{5}{2}x + 4\right)$

- (A) $x = -1$ (B) $x = \frac{6}{7}$ (C) $x = \frac{7}{9}$ (D) $x = \frac{12}{17}$

9. The sum of -4 and 8 times a number is multiplied by 3. The result is 15 less than 25 times the number. What is the number?

- (A) -12 (B) $\frac{6}{7}$ (C) 0 (D) 3

10. The editors found that 0.0016 of the words in the book were misspelled. If there were 250,000 words in the book, how many words were spelled properly?

- (A) 400 (B) 250401 (C) 246000 (D) 249600

11. Seven-eighths of the apples were red. If 224 apples were not red, how many apples were red?

- (A) 1792 (B) 196 (C) 256 (D) 1568

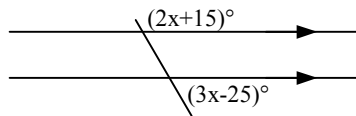
12. Find three consecutive even integers so that the twice the sum of the second and third is twelve less than six times the first

- (A) 9, 10, 11 (B) 6, 8, 10 (C) 12, 14, 16 (D) 3, 4, 5

13. Thirty-five hundred is what percent of 280?

- (A) 1250% (B) 125 (C) 80% (D) 125%

14. Find x.



- (A) 38 (B) 40 (C) 8 (D) 34

15. Which pair of points lie on the line $x+3y=21$?

- (A) (7,0)(8,-3) (B) (0,7)(-1,-10) (C) (3,6)(0,7) (D) (1,4)(0,7)

16. Solve: $-3^2 - 2^3 - (-2^2) - 5^0 - (3-3x) = 2(1-x)$

- (A) $x = \frac{23}{5}$ (B) $x = \frac{19}{5}$ (C) $x = \frac{27}{5}$ (D) $x = 15$

17. 72 is thirty percent of what number?

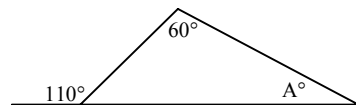
- (A) 21.6 (B) 2160 (C) $41\frac{2}{3}$ (D) 240

18. Simplify: $\frac{a^{-2}}{b^0} \left(\frac{c^2 a^3 (b^{-3} c^3) x^{-3}}{(x^3 y^{-3}) a^2} \right)$
- (A) $\frac{c^5 y^3}{a b^3 x^6}$ (B) $\frac{a^{-6} c^6 y^3}{a^{-4} b^3 x^{-9}}$ (C) $\frac{a^3 c^5 y^3}{b^3 x^6}$ (D) $\frac{a^3 c^5 y^3}{b^3}$

19. Evaluate $m^{-3} n^2 (n-m) - n^2 m^2$ if $m=-2$ and $n=4$

- (A) $-\frac{19}{4}$ (B) $-\frac{49}{4}$ (C) 3 (D) $\frac{47}{4}$

20. Find A.



- (A) 70 (B) 50 (C) 10 (D) 120